

In the abstract:

The abstract is changed as follows.

--A method and corresponding apparatus for encoding a sequence of bits for transmission as symbols, some of the bit positions of the symbols having a higher bit error rate than other bit positions. ~~The method includes: a step (31, 32, 41, 42) of providing a~~ A plurality of sequences of bits is provided using a convolutional encoder ~~(31, 41)~~, in response to a sequence of input bits, each sequence of bits being defined by a predetermined generator polynomial having a predetermined level of sensitivity to puncturing. Then ~~, and a step (33, 44) of mapping the bits of each sequence of bits are mapped~~ to symbol positions based on the level of sensitivity of the generator polynomial defining the sequence of bits. With interleaving, the mapping of bits of each sequence of bits to symbol positions ~~(33, 44)~~ can precede a symbol interleaving step ~~(34)~~, or it can follow a bit interleaving step ~~(43)~~.--

In the disclosure:

The paragraph at page 2, beginning line 24, is changed as follows.

--In prior art systems, a convolutional encoded and possibly punctured bit sequence (a bit sequence where some of the bits, called the punctured bits, have been removed) is interleaved before modulation, as shown in Figs. 1 and 2. The interleaving operation is vital when convolutional codes are used, because such codes are designed to cope well with random errors ~~and~~ but their performance decreases dramatically if the errors are bursty (and if interleaving is not used).--

The paragraph at page 4, beginning line 29, is changed as follows.

--A convolutional encoder, which is usually implemented as a shift register, can be completely described by a connection diagram, such as the connection diagram 110 of Fig. 1A for a rate  $R = 1/2$  encoder (2 output bits for every input bit), showing three delay elements 111a 111b 111c, and two adders 112 114. The code rate  $R$  is in general written as  $k/n$  indicating that the encoder maps a  $k$ -tuple to an  $n$ -tuple. It is possible to more concisely describe an encoder than by providing a connection diagram. One more concise specification can be given by stating the values of  $n$ ,  $k$ , and the so-called constraint length  $K$  (defined in different ways, such as the number of  $k$ -tuples that affect the formation of each  $n$ -tuple during encoding). For the encoder of Fig. 1A,  $n=2$ ,  $k=1$ , and  $K=3$ . Another way is to give the adder connections in the form of vectors or generator polynomials. For example, the rate  $1/2$  code of Fig. 1A has the generator vectors  $g_1 = 111$  and  $g_2 = 101$ , or equivalently, the generator polynomials  $g_1(x) = x^2 + x + 1$  and  $g_2(x) = x^2 + 1$ , where  $x$  is the delay. ~~(D implies one samples~~

~~delay,  $D^2$  implies two samples delay etc.)~~ (x implies a delay of  
one sample,  $x^2$  implies a delay of two samples, and so on.)--